



How to Create Metadata in ArcGIS 10.0 Appendices

Intermountain Region GIS Program

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Appendix A: ArcGIS, FGDC & ISO Metadata Defined

ESRI's ArcGIS Metadata

ArcGIS 10.0 metadata maintains information in ArcGIS metadata format. The ArcGIS metadata format contains elements that can store all the contents from all the metadata standards that are supported by ArcGIS Desktop. This content includes all FGDC metadata content, all ISO 19139 metadata content, all North American Profile metadata content, and all INSPIRE metadata content. It also includes ArcGIS-internal content such as thumbnails, enclosures, and detailed properties of ArcGIS items.

Whether you are working with ArcGIS 9.3 metadata, FGDC, or ISO metadata, you enter metadata information into ArcGIS 10.0 with one editor. No matter which metadata style you use, all information that you provide in the 10.0 Description tab is stored in the ArcGIS metadata format.

When you view an item's metadata, ArcGIS automatically displays information inherent to the dataset through a synchronization process. This includes spatial representation, attribute fields, etc. These properties are only stored and updated in the ArcGIS metadata format, which is why it is important to "upgrade" all old metadata to the 10.0 metadata format.

ArcGIS 10.0 metadata is not designed to be used outside ESRI ArcGIS software. If you need to provide metadata for all software systems, you will need to export the metadata to FGDC Metadata XML format and share the exported XML file. Exporting to the FGDC metadata format can be found under Appendix C.

FGDC Metadata

The Federal Geographic Data Committee (FGDC) contains 19 members from several federal agencies, who coordinate the use, development, and distribution of geospatial data on a national level. They are responsible for developing a distributed discovery mechanism for national digital geospatial data, what is often referred to as the 'FGDC Metadata Standard'.

The FGDC started with the Content Standard for Digital Geospatial Metadata (CSDGM) Version 2 (FGDC-STD-001-1998) which at the time was the current US Federal Metadata standard. After being adopted in 1994, in 1995 all Federal agencies were ordered by Executive Order 12096 to use this new FGDC metadata standard to document geospatial data. This FGDC Metadata Standard has currently been adopted by state and local governments as well. Metadata is critical to data discovery.

In the 2009 FGDC annual report, the FGDC announced the distribution of the North American Profile of ISO 19115:2003 (NAP-Metadata) as an American National Standard. Although this standard is recognized and used by some, Federal agencies have not been obliged to adopt this standard.

Appendix D contains the CSDGM Essential Metadata Elements which makes up the FGDC Metadata Standard. All NPS data that is published to the public or other agencies must follow the basic minimum requirements for FGDC standards.

ISO Metadata

The International Organization for Standardization is an international standard-setting body composed of representatives of national standards organizations from more than 70 countries. Its concept was started in 1926 by the International Federation of the National Standardizing Associations (ISA). ISA was disbanded in 1942 during WWII and then founded the International Organization for Standardization on February 23, 1947. The International Organization for Standardization is often referred to by its short-form name, ISO.

The ISO technical committee developed the ISO standard 19115, *Geographic Information - Metadata*, a metadata standard designed for international use. The standard attempts to satisfy the requirements of all well-known metadata standards in hopes of producing a more universally accepted and therefore more internationally used metadata standard. The Federal Geographic Data Committee (FGDC) has been transitioning towards implements the ISO metadata standard. There is speculation that the ISO standard will become the new federally required Metadata standard in the next few years.

Appendix B: Additional Metadata Notes & References

FGDC CSDGM Metadata Style & ArcGIS Metadata

The metadata that is displayed in the ArcCatalog 10.0 Description tab is called ArcGIS metadata. However, metadata can be created and displayed in several different “styles” and when working with ArcGIS 10.0, it is necessary for NPS employees to choose the FGDC CSDGM Metadata style. Choosing FGDC CSDGM Metadata ensures you are using the correct XSLT style sheet to display metadata and that it contains the correct XML schema to validate metadata. It also makes sure when exporting to an XML file that your metadata is formatted correctly for the FGDC XML schema and will export a FGDC metadata formatted style output.

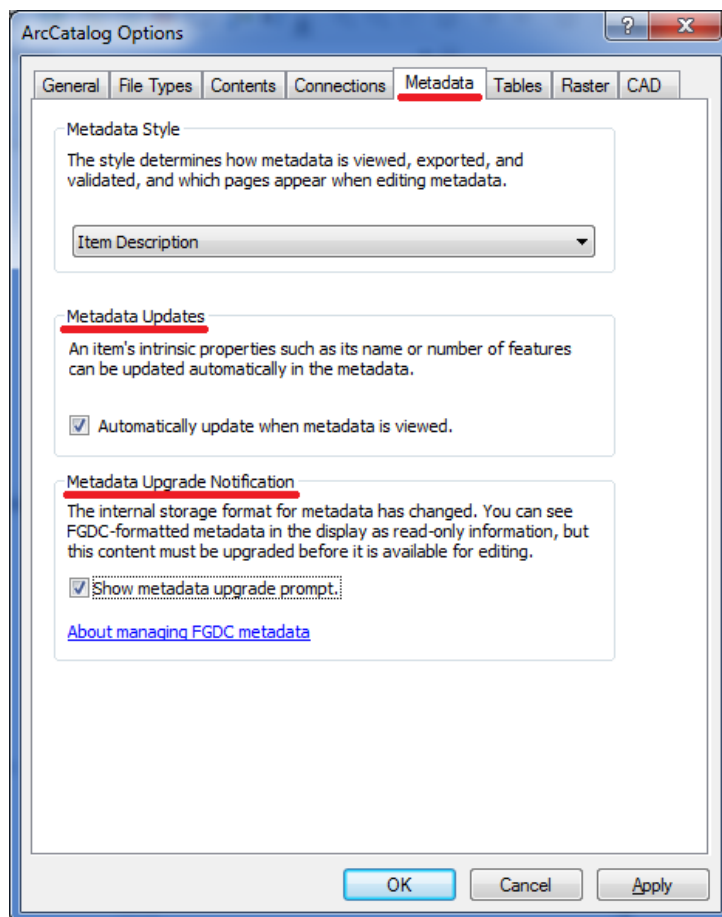
Unfortunately, no matter which metadata style you used before ArcGIS 10.0 SP3, once you have upgraded to this level, all information that you provide in the ArcCatalog Description tab is stored in the ArcGIS metadata format.

ArcGIS 10.0 - Upgrading Metadata

ArcCatalog 10.0 will only maintain metadata in the ArcGIS metadata format. Whether your metadata was created in 9.3, in ESRI-ISO format, or some other form, it must be upgraded to the ArcGIS metadata format. Upgrading your metadata is the only way ArcGIS will automatically recognize and update the dataset's properties.

It is necessary to upgrade your metadata, even metadata edited in ArcGIS 9.3 using the FGDC Metadata Editor add-in. The FGDC Metadata Editor add-in is a tool you can add to ArcCatalog 9.3 that opens the FGDC metadata editor available in previous ESRI GIS releases. Unfortunately the 9.3 FGDC Metadata Editor creates FGDC elements that only “sit next to” ArcGIS 10.0 elements and consequently is not recognized by ArcGIS 10.0 Metadata format. Subsequently, the metadata will not be automatically updated. FGDC Metadata Editor-made metadata must be upgraded to be recognized by ArcGIS 10.0.

It is recommended that you do not use the FGDC Metadata Editor add-in while using ArcGIS 10.0. It is easier and better to edit and manage your metadata directly in the ArcGIS 10.0 Metadata Editor.



When starting a metadata editing session, NPS users are encouraged to change their Metadata Update options to “Automatically update when metadata is viewed”. If this setting is made, an Upgrade button will automatically appear in the Description tab, allowing you to upgrade the existing metadata using the

Upgrade Metadata tool. If metadata is already in the ESRI-ISO format it is automatically upgraded into the ArcGIS metadata format.

If you prefer to upgrade metadata for many items at once, you can run the Upgrade Metadata tool in batch mode or with a Python script. You might want to do this for all items in a folder or geodatabase. Remember to upgrade each *individual* item that has metadata; if you run the Upgrade Metadata tool with a feature *dataset* provided as the item to upgrade, the tool will upgrade the feature dataset's metadata, not the metadata for each item in the feature dataset.

USGS MP Metadata Translator

To see your metadata in FGDC-format you must export your ArcGIS metadata to a FGDC-formatted XML. Then to read the XML document you run through a translator to re-format the metadata and save it to a more readable format, such as HMTL or a text file.

The USGS MP Metadata Translator translates metadata using the metadata parser (mp) utility. The mp is built and maintained by the USGS but a version has been provided with ArcGIS Desktop. The mp utility follows the FGDC Content Standard for Digital Geospatial Metadata and the tool can be used simply to validate FGDC metadata content. FGDC metadata elements in ArcGIS are not laid out in the correct order as specified by the FGDC CSDGM rules, so they need to be reordered with the mp metadata translator tool to be read correctly. As the tool is being used, the mp will consequently produce warnings indicating the elements are out of order. Then it processes the ArcGIS metadata to select only FGDC metadata elements and order them correctly before exporting or validating the resulting XML file.

The original file going into the tool has to be an XML file or feature containing metadata. The tool will only accept FGDC CSDGM XML formatted metadata because the final exported file will only contain FGDC CSDGM XML elements. The tool will not convert an FGDC text file to an FGDC XML file. The tool can export files in HTML, text, SGML, and XML format.

Appendix C: Exporting Metadata

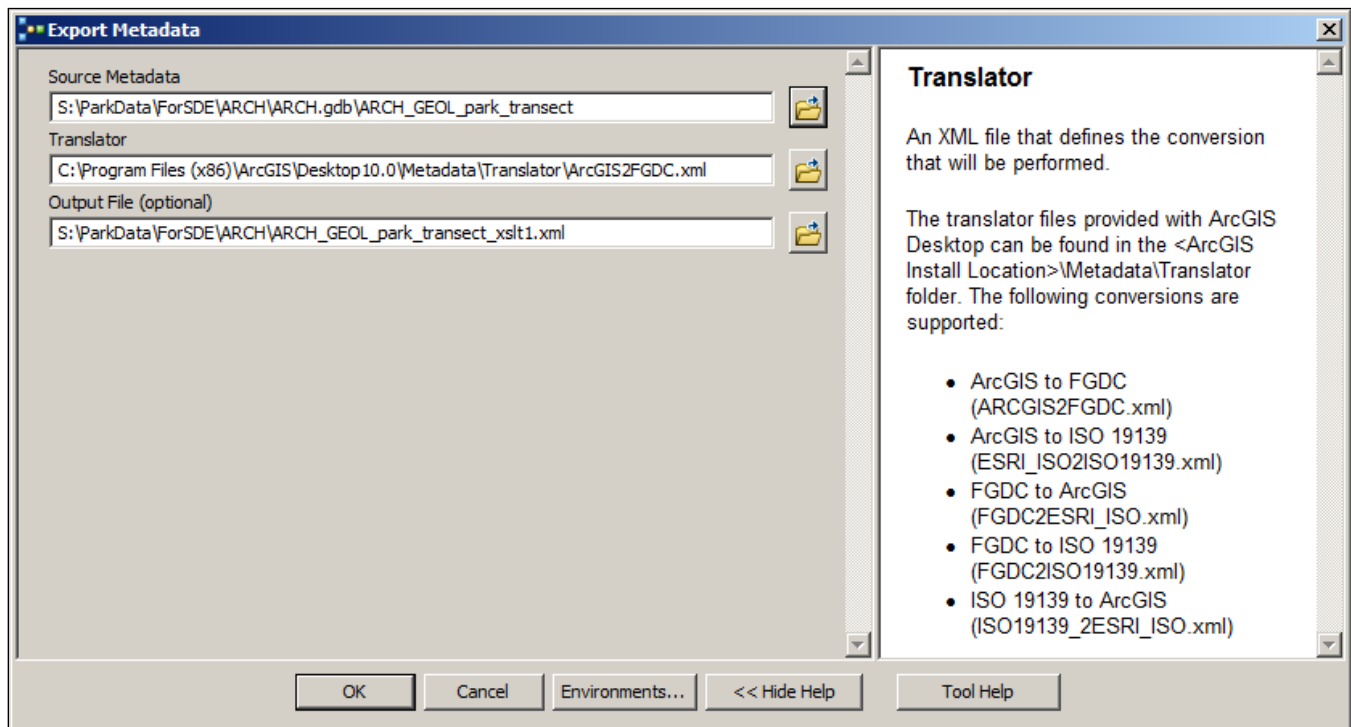
Exporting Metadata to FGDC & HTML Format

ArcGIS 10.0 produces metadata that can be set to the FGDC CSDGM Metadata style. However, that original file cannot be “read” properly in FGDC format. ArcGIS metadata has to be exported into a FGDC-formatted XML file and then “translated” using the USGS MP Metadata Translator tool to properly export a FGDC-formatted output.

If your data is going to be distributed outside of the NPS, it *MUST* be FGDC compliant.

Exporting to a FGDC-Formatted File

1. To export your metadata, open the ArcToolbox. Navigate to **Conversion Tools, Metadata, Export Metadata**.
 - 1.1. When the window opens, fill the Source Metadata box using the browse button to navigate to the metadata you want to export.
 - 1.2. If the Translator box isn't already filled in, click in the text box and look at the **Show Help** on the right side of the window. Using the example below, click the browse button and make sure your Translator is pointing to **ArcGIS2FGDC.xml**, which should be located in C:\Program Files (x86)\ArcGIS\Desktop10.0\Metadata\Translator (if you are running Windows 7.)
 - 1.3. Point your Output File to a location in which to store the XML file.
 - 1.4. Click **OK** when done.

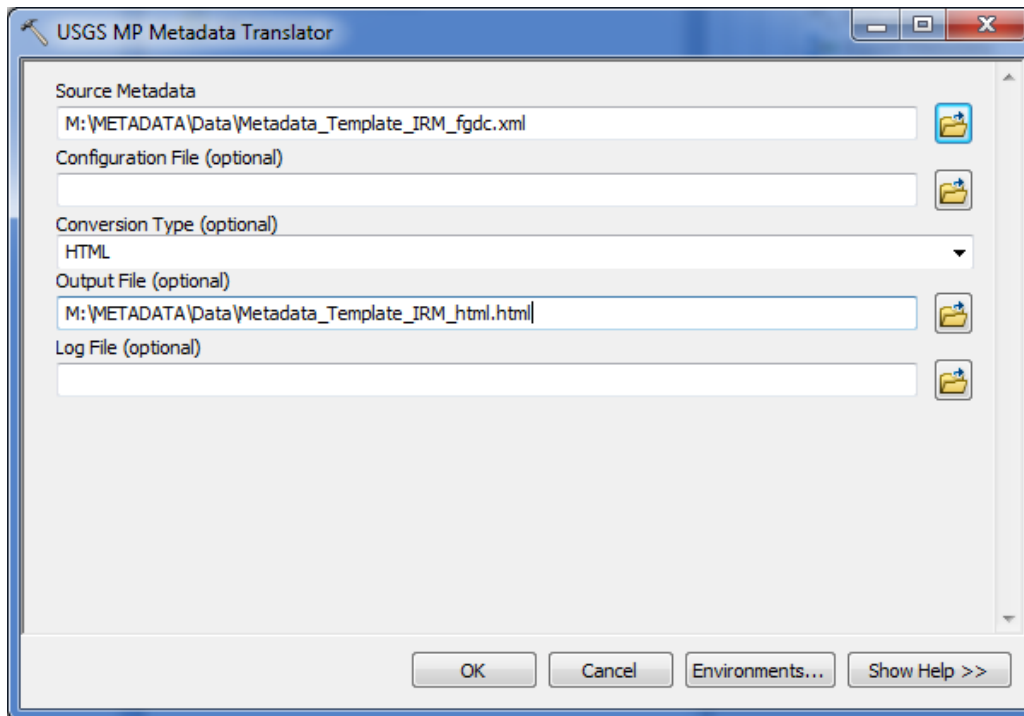


Exporting to a HTML-Formatted File

The USGS Metadata Translator tool, or USGS metadata parser utility, known as mp, is used to export or validate FGDC metadata. It can be used to export ArcGIS XML metadata files into several other different formats, but cannot be used to convert other formats into ArcGIS XML files. For example, FGDC text files can't be converted to an FGDC XML file using this tool. To read more on the USGS MP Metadata Translator, refer to Appendix B.

You must first export your ArcGIS metadata to FGDC, using the export tool above, before converting it to HTML.

2. In the ArcToolbox navigate to **Conversion Tools, Metadata, USGS MP Metadata Translator**.
 - 2.1. Under Source Metadata browse to the data metadata you are converting.
 - 2.2. Under Conversion Type (optional), click the down arrow and choose **HTML**.
 - 2.3. Under Output File (optional) save your new file in a known location that is **in a folder** not a database.
IMPORTANT: label your file with a **.HTML** extension or the file won't save correctly.
 - 2.4. Click the **OK** button.
You will get some warnings during the process or saved in the log file but you can ignore all these warnings.
 - 2.5. Find your new saved **.HTML** file and double-click on it. It should open in your default Internet browser.



Appendix D: FGDC Essential Metadata Elements - Table Guide

Referenced site: http://www.fgdc.gov/metadata/documents/CSDGMEssentialMeta_20080514.pdf

Content Standard for Digital Geospatial Metadata (CSDGM) Essential Metadata Elements

The Content Standard for Digital Geospatial Metadata (CSDGM) Essential Metadata Elements emphasizes the essential pieces of metadata as set by the CSDGM. It is important that the mandatory elements are completed for fully compliant metadata. Additional elements are useful and do help the understanding of the metadata, but are not required.

The metadata set below is best applied to GIS data and imagery maintained in standard horizontal coordinate systems. For more specialized data and data maintained in vertical and local horizontal coordinate systems, additional metadata standards may apply.

To read more about CSDGM element definitions and domains view the following documents located at the FGDC Metadata Publication website: <http://www.fgdc.gov/metadata/metadata-publications-list>

- Content Standard for Digital Geospatial Metadata Workbook, Version 2.0
- Metadata Quick Guide

Legend:
bold black text = CSDGM mandatory element
green text = CSDGM mandatory if applicable (MIA) element
italicized text = CSDGM optional element
stylized text = use of element is conditional

FGDC	Location in ArcGIS Editor
SECTION ONE: IDENTIFICATION	
Originator	OVERVIEW>CITATION CONTACTS, New Contact>Organization
Publication_Date	OVERVIEW>CITATION, Dates>Published
Title	OVERVIEW>ITEM DESCRIPTION, Title
Abstract	OVERVIEW>ITEM DESCRIPTION, Description
Purpose	OVERVIEW>ITEM DESCRIPTION, Summary
Time_Period_of_Content	RESOURCE>EXTENTS, Extent>New Instant Period (or Instant) Extent
Currentness_Reference	RESOURCE>EXTENTS, Extents>Description
Progress	RESOURCE>DETAILS, New Status
Maintenance_and_Update_Frequency	RESOURCE>MAINTENANCE, Update Frequency
West_Bounding_Coordinates	RESOURCES>Extents, Bounding box (should automatically fill in)
East_Bounding_Coordinates	RESOURCES>Extents, Bounding box (should automatically fill in with projected data)
North_Bounding_Coordinates	RESOURCES>Extents, Bounding box (should automatically fill in with projected data)
South_Bounding_Coordinates	RESOURCES>Extents, Bounding box (should automatically fill in with projected data)
Theme_Thesaurus	OVERVIEW>TOPICS & KEYWORDS, Theme Keywords>Thesaurus Citation, Title
Theme_Keywords	OVERVIEW>TOPICS & KEYWORDS, Theme Keywords

Access_Constraints	METADATA>CONSTRAINTS, Legal Constraints>+New Legal Constraints
Use_Constraints	OVERVIEW>ITEM DESCRIPTION, Use Limitation
Point_of_Contact	RESOURCE>POINTS OF CONTACT, Contact>Role
Contact_Organization (preferred) or Contact Person	RESOURCE>POINTS OF CONTACT, Contact>Organization or Name
Contact_Position	RESOURCE>POINTS OF CONTACT, Contact>Position
Address_Type	RESOURCE>POINTS OF CONTACT, Contact>Contact Information, Address Type
Address	RESOURCE>POINTS OF CONTACT, Contact>Contact Information, Address
City	RESOURCE>POINTS OF CONTACT, Contact>Contact Information, City
State_or_Province	RESOURCE>POINTS OF CONTACT, Contact>Contact Information, State
Postal_Code	RESOURCE>POINTS OF CONTACT, Contact>Contact Information, Postal Code
Contact_Voice_Telephone	RESOURCE>POINTS OF CONTACT, Contact>Contact Information, Phone
<i>If data are available online:</i>	
Online_Linkage	RESOURCE>POINTS OF CONTACT, Contact Information, Online Resource, Linkage
Section Two: Data Quality	
Logical_Consistency_Report	RESOURCE>QUALITY, New Report, Report Type: (Conceptual Consistency) & Measure, Description
Completeness_Report	RESOURCE>QUALITY, New Report, Report Type: (Completeness Omission) & Measure, Description
Process_Description	RESOURCE>LINEAGE, Process Step, Process Description
Process_Date	RESOURCE>LINEAGE, Process Step, Date
<i>If source data was used:</i>	
Source_Originator	RESOURCE>LINEAGE, Data Source>Source Citation>+New Contact, Name & Role
Source_Publication_Date	RESOURCE>LINEAGE, Data Source>Source Citation>Dates, Published
Source_Title	RESOURCE>LINEAGE, Data Source>Source Citation, Tiles
Source_Online_Linkage	RESOURCE>LINEAGE, Data Source>Source Citation>Contact Information>Online Resource, Linkage
Source_Scale_Denominator	RESOURCE>LINEAGE, Data Source>Scale Denominator
Type_of_Source_Media	RESOURCE>LINEAGE, Data Source>Media Name
Source_Time_Period_of_Content	RESOURCE>LINEAGE, Data Source>New Source Extent>New Temporal Period (or Instant) Extent
Source_Currentness_Reference	RESOURCE>LINEAGE, Data Source>Source Extent>Description
Source_Citation_Abbreviation	RESOURCE>LINEAGE, Data Source, Source Citation, Alternate Title
Source_Contribution	RESOURCE>LINEAGE, Data Source, Source Description
<i>If data assessments performed:</i>	
Attribute_Accuracy_Report (if applicable)	RESOURCE>QUALITY, Report Type: Quantitative Attribute Accuracy, Measure>Description
Horizontal_Positional_Accuracy_Report (if applicable)	RESOURCE>QUALITY, Report Type: Absolute External Positional Accuracy, Dimension: Horizontal

Vertical_Positional_Accuracy_Report (if applicable)	RESOURCE>QUALITY, Report Type: Absolute External Positional Accuracy, Dimension: Vertical
If aerial photography or imagery:	
Cloud_Cover	RESOURCE>CONTENT, New Image Description, Quality Code, Cloud Cover Percentage
SECTION THREE: SPATIAL DATA ORGANIZATION INFORMATION	
Direct_Spatial_Reference_Method	RESOURCE>DETAILS, Spatial Representation Type (should be automatically filled in)
SECTION FOUR: SPATIAL REFERENCE INFORMATION	
Horizontal_Datum	(should be automatically filled in)
Ellipsoid_Name	(should be automatically filled in)
Semi-Major_Axis	(should be automatically filled in)
Denominator_of_Flattening_Ratio	(should be automatically filled in)
Horizontal Coordinate System (compound element)	(should be automatically filled in)
If Geographic (Lat/Lon):	
Latitude_Resolution	(should be automatically filled in if applicable)
Longitude_Resolution	(should be automatically filled in if applicable)
Geographic_Coordinate_Units	(should be automatically filled in if applicable)
or	
If Planar (projected) data:	
Planar_Coordinate_Encoding_Method	(should be automatically filled in if applicable)
Abscissa_Resolution	(should be automatically filled in if applicable)
Ordinate_Resolution	(should be automatically filled in if applicable)
Planar_Distance_Units	(should be automatically filled in if applicable)
If Map Projection:	
Map_Projection_Name	(should be automatically filled in)
<projection parameters - vary with Projection>	
or	
If Grid Coordinate System:	
Grid_Coordinate_System_Name	(should be automatically filled in)
<coordinate system parameters - vary with Coordinate System>	(should be automatically filled in)
Additional elements are required for data maintained using:	
Distance_and_Bearing_Representation	(should be automatically filled in)
Local_Planar_Horizontal_Coordinate_System	(should be automatically filled in)
Local_Horizontal_Coordinate_System	(should be automatically filled in)
Vertical_Coordinate_System	(should be automatically filled in if applicable)
SECTION FIVE: ENTITY AND ATTRIBUTE INFORMATION	
Entity_and_Attribute_Overview	RESOURCE>FIELDS, Overview Description, Summary
and/or	
Entity_and_Attribute_Detailed_Description	RESOURCE>FIELDS, Overview Description, Citation

If the data includes a database or coded domain that is not documented, you are strongly encouraged to additionally develop the detailed description within the fields themselves.

SECTION SIX: DISTRIBUTION INFORMATION

Distributor_Contact	RESOURCE>DISTRIBUTION, Distributor, Contact, Organization
Contact_Organization (<i>preferred</i>) or Contact_Person	RESOURCE>DISTRIBUTION, Distributor, Contact, Organization (or Name)
<i>Contact_Position</i>	
Address_Type	RESOURCE>DISTRIBUTION, Distributor, Contact>Contain Information, Address Type
<i>Address</i>	RESOURCE>DISTRIBUTION, Distributor, Contact>Contain Information, Address
City	RESOURCE>DISTRIBUTION, Distributor, Contact>Contain Information, City
State_or_Province	RESOURCE>DISTRIBUTION, Distributor, Contact>Contain Information, State
Postal_Code	RESOURCE>DISTRIBUTION, Distributor, Contact>Contain Information, Postal Code
Contact_Voice_Telephone	RESOURCE>DISTRIBUTION, Distributor, Contact>Contain Information, Phone
Distribution_Liability	RESOURCE>CONSTRAINTS, Legal Constraints, New Use Limitations, Use Limitations

SECTION SEVEN: METADATA REFERENCE

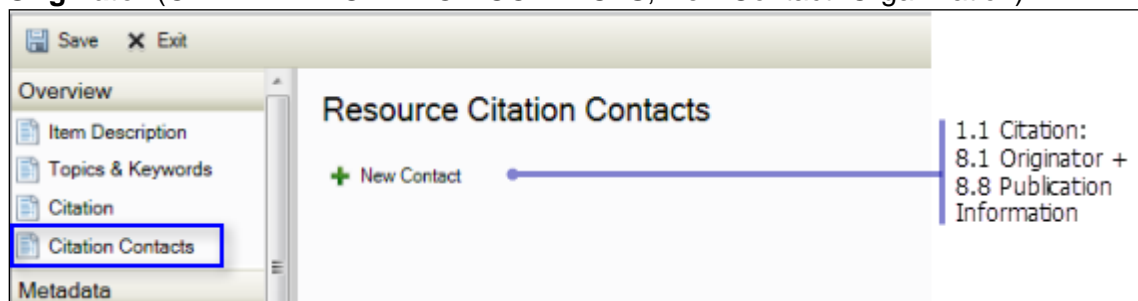
Metadata_Date	METADATA>DETAILS, Date Stamp
Metadata_Contact	METADATA>CONTACTS, Contact
Contact_Organization or Contact_Person	METADATA>CONTACTS, Contact, Organization (or Name)
<i>Contact_Position</i>	METADATA>CONTACTS, Contact, Role
Address_Type	METADATA>CONTACTS, Contact>Contact Information, Address Type
<i>Address</i>	METADATA>CONTACTS, Contact>Contain Information, Address
City	METADATA>CONTACTS, Contact>Contain Information, City
State_or_Province	METADATA>CONTACTS, Contact>Contain Information, State
Postal_Code	METADATA>CONTACTS, Contact>Contain Information, Postal Code
Contact_Voice_Telephone	METADATA>CONTACTS, Contact>Contain Information, Phone
Metadata_Standard_Name	(should be automatically filled in)
Metadata_Standard_Version	(should be automatically filled in)

Appendix E: FGDC Essential Metadata Elements - Illustrated Guide

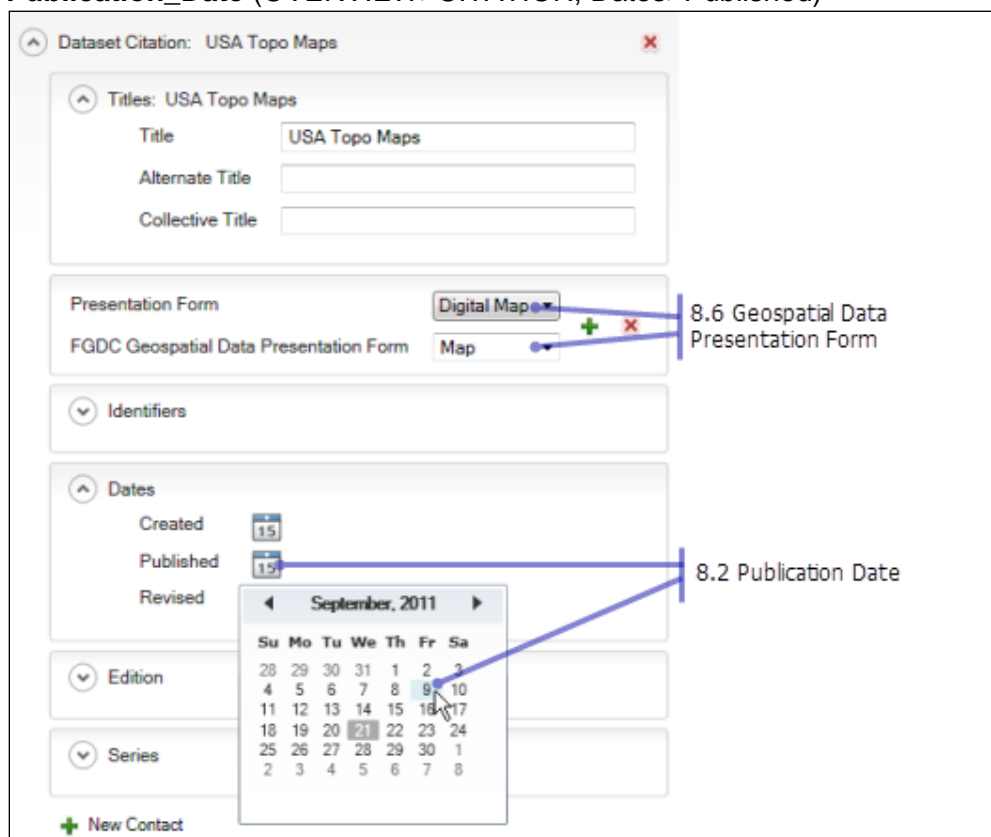
This guide details the FGDC metadata elements and where it can be found in the ArcGIS 10.0 metadata format.

SECTION ONE: IDENTIFICATION

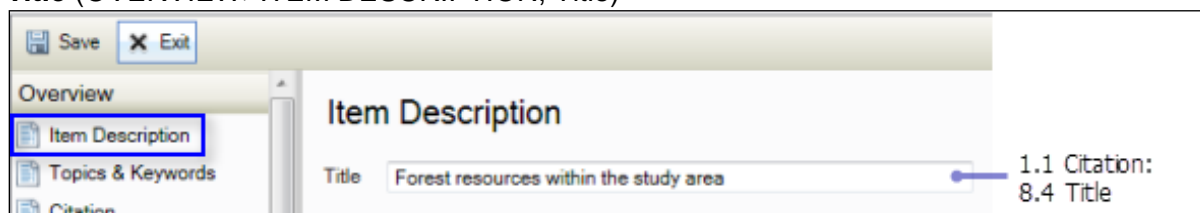
Originator (OVERVIEW>CITATION CONTACTS, New Contact>Organization)



Publication_Date (OVERVIEW>CITATION, Dates>Published)

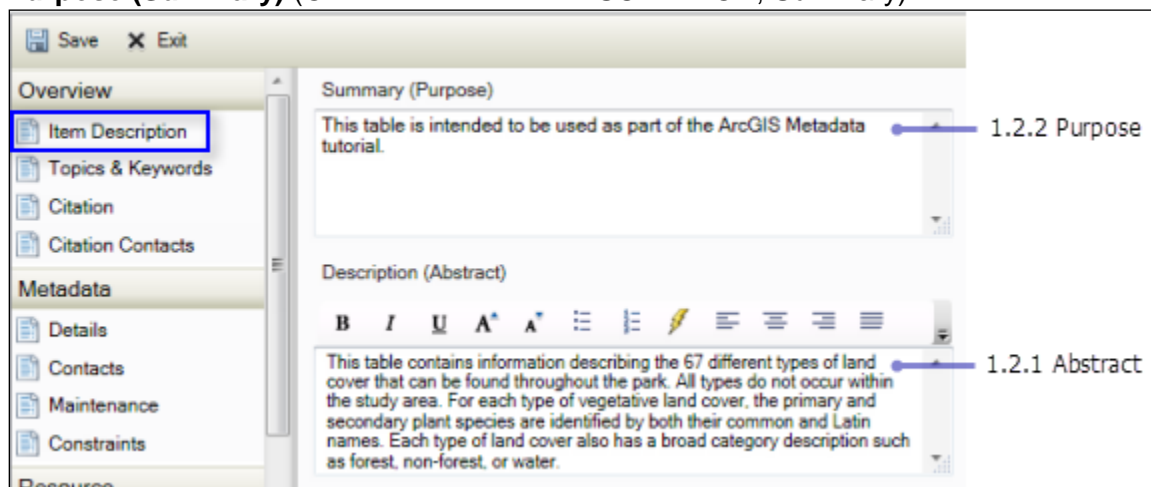


Title (OVERVIEW>ITEM DESCRIPTION, Title)

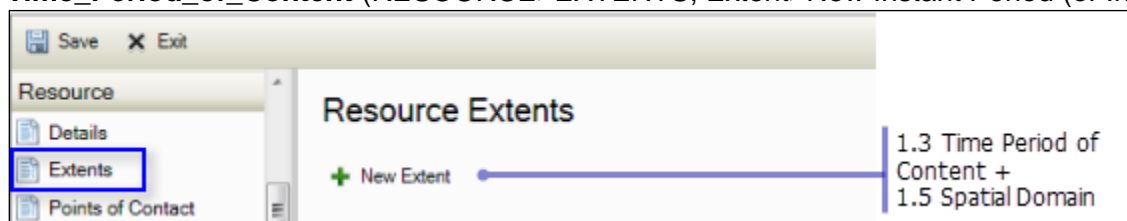


Abstract (Description) (OVERVIEW>ITEM DESCRIPTION, Description)

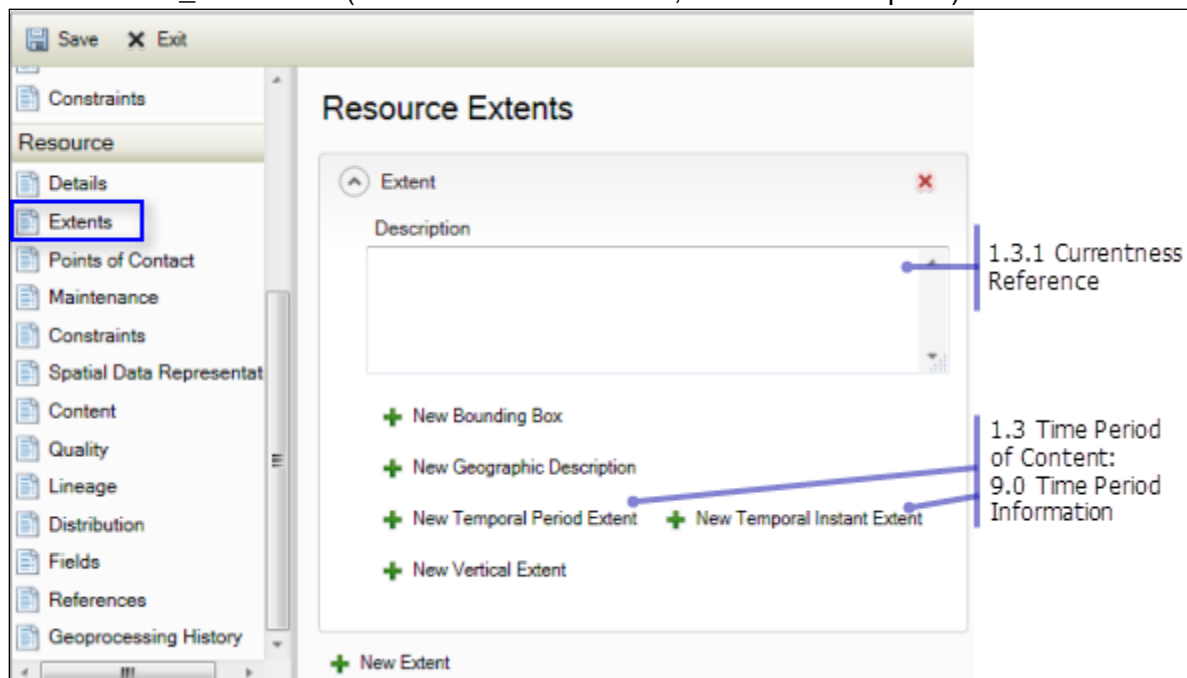
Purpose (Summary) (OVERVIEW>ITEM DESCRIPTION, Summary)



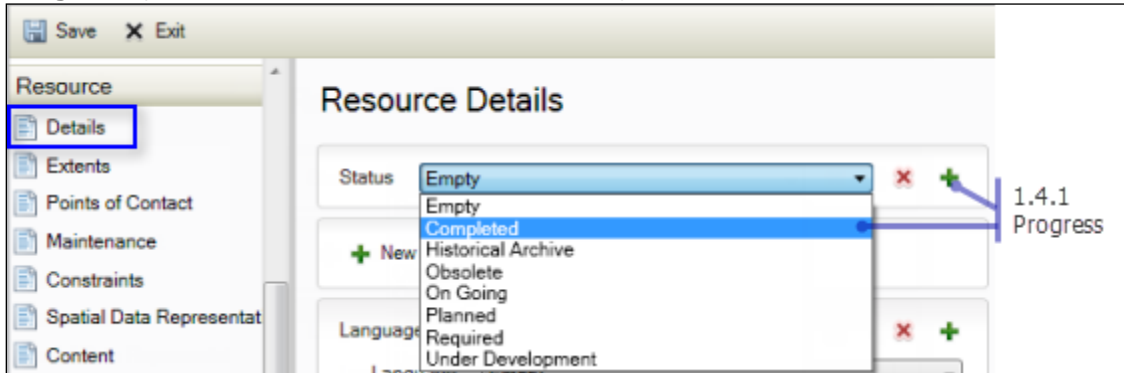
Time_Period_of_Content (RESOURCE>EXTENTS, Extent>New Instant Period (or Instant) Extent)



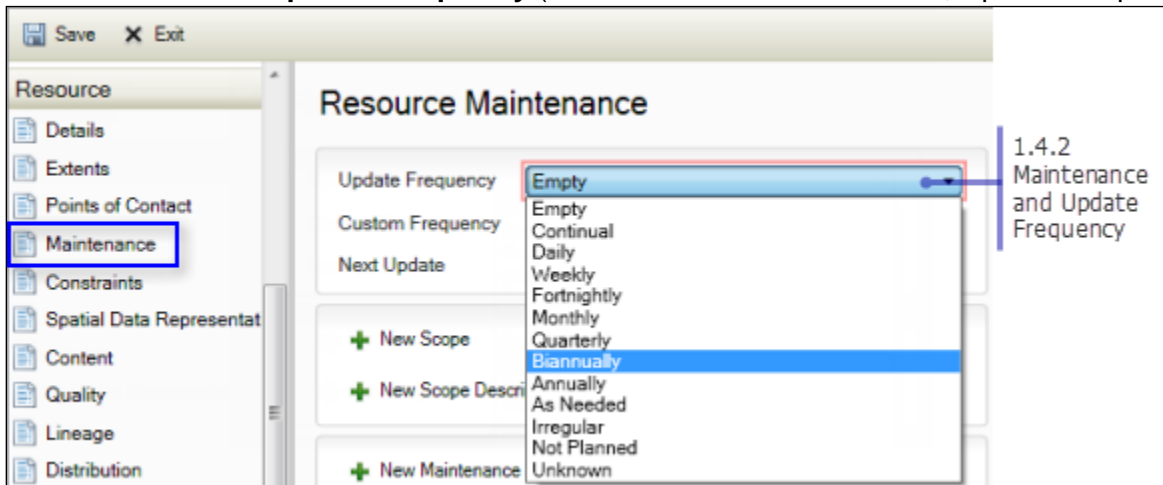
Currentness_Reference (RESOURCE>EXTENTS, Extents>Description)



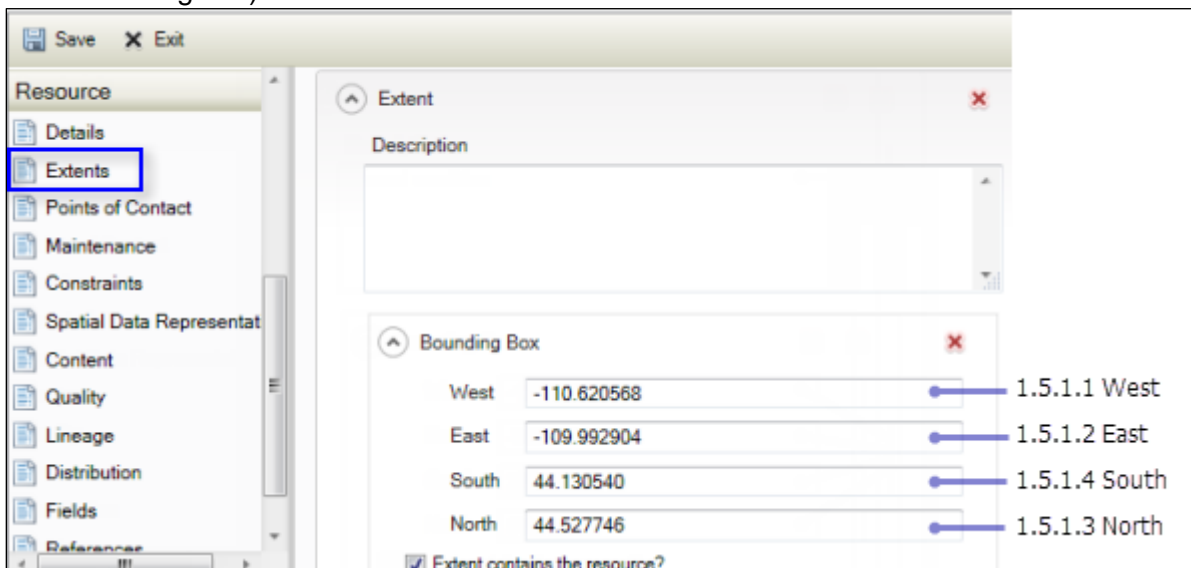
Progress (RESOURCE>DETAILS, New Status)



Maintenance_and_Update_Frequency (RESOURCE>MAINTENANCE, Update Frequency)

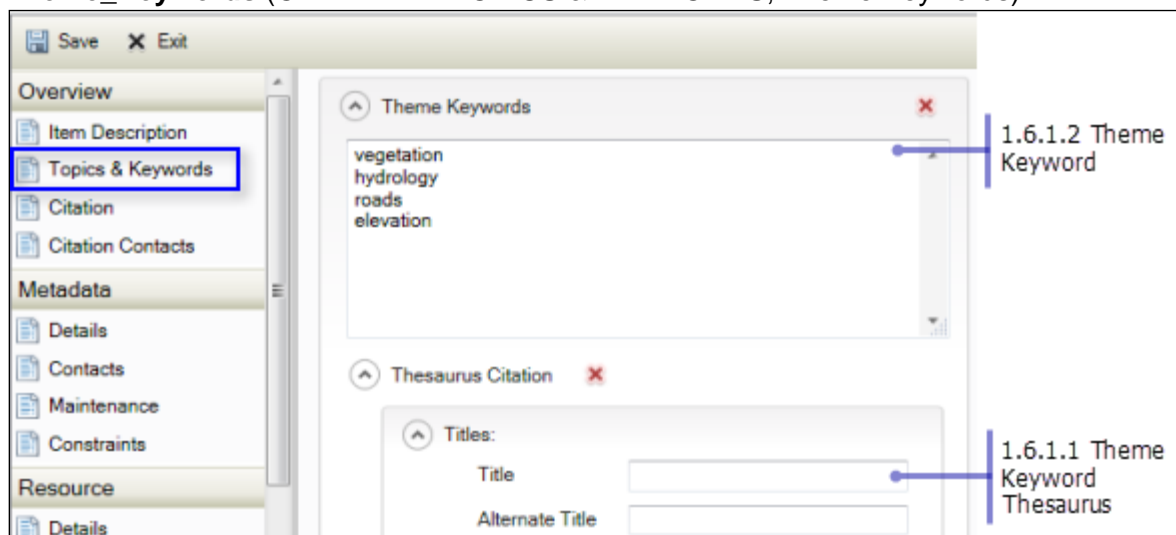


West, East, North, South Bounding Box (should be automatically filled) (RESOURCES>Extents, New Bounding box)

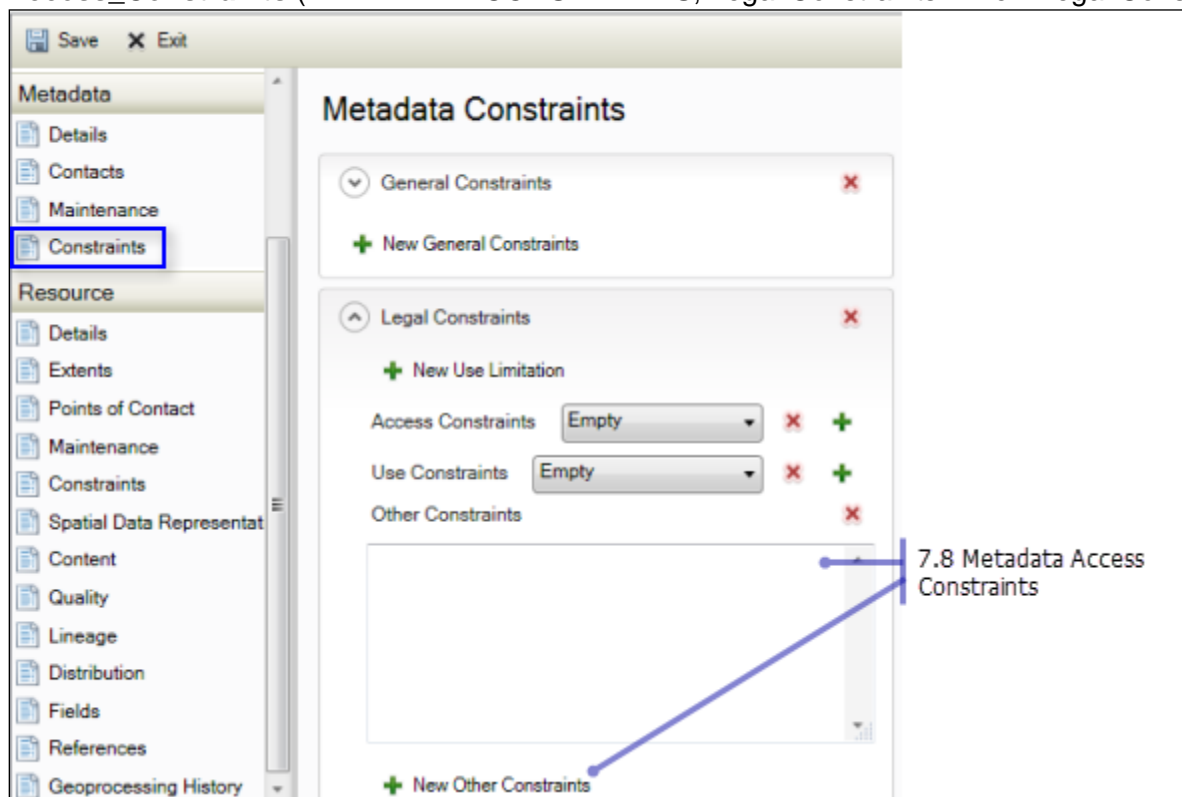


Theme_Thesaurus (OVERVIEW>TOPICS & KEYWORDS, Theme Keywords>Thesaurus Citation, Title)

Theme_Keywords (OVERVIEW>TOPICS & KEYWORDS, Theme Keywords)



Access_Constraints (METADATA>CONSTRAINTS, Legal Constraints>+New Legal Constraints)



Use_Constraints (OVERVIEW>ITEM DESCRIPTION, Use Limitation)

Save X Exit

Overview

- Item Description
- Topics & Keywords
- Citation
- Citation Contacts

Metadata

- Details
- Contacts
- Maintenance
- Constraints

Credits

National Park Service, Yellowstone National Park

Use Limitation

See the ESRI License Agreement for Disclaimer of Warranties and Limitation on Liabilities with respect to the sample Data contained herein. The sample Data is the intellectual property of the respective data provider(s) and is used herein with permission. Source: National Park Service, Yellowstone National Park. The sample Data is redistributable with proper metadata and source attribution notices to the respective data provider(s).

1.8 Use Constraints

Point_of_Contact (RESOURCE>POINTS OF CONTACT, Contact)

Contact_Organization (*preferred*) or **Contact_Person**

Contact_Position

Address_Type

Address

City

State_or_Province

Postal_Code

Contact_Voice_Telephone

Contact: ArcGIS Metadata Team

Name: ArcGIS Metadata Team

Organization: Environmental Systems Research Institute, Inc.

Position: Product Engineer

Role: Point of Contact

Contact Information

Email: info@esri.com

Online Resource

Address Type: Both

Address: 380 New York St.

City: Redlands

State: California

Postal Code: 92373

Country: USA

Phone: 909-793-2853

TDD/TTY: 909-793-2853

Fax: 909-793-5953

Instructions: <http://www.esri.com/about-esri/contact.htm>

Hours: 8:00am - 5:00pm Pacific Time, Mon.-Fri.

10.1 Contact Person Primary +

10.2 Contact Organization Primary

10.3 Contact Position

10.4 Contact Address

10.5 Contact Voice Telephone

10.6 Contact TDD/TTY Telephone

10.7 Contact Facsimile Telephone

10.8 Contact Electronic Mail Address

10.9 Hours of Service

10.10 Contact Instructions

If data are available online:

[Online_Linkage](#) (RESOURCE>POINTS OF CONTACT, Contact Information, Online Resource, Linkage)

The screenshot shows the 'Distribution Information' dialog box in the ArcGIS 10.0 Metadata Editor. The 'Online Resource' section is expanded, and the 'Linkage' field is highlighted with a blue box. A blue arrow points from the 'Linkage' field to the text '1.1 Citation: 8.10 Online Linkage'.

1.1 Citation:
8.10 Online Linkage

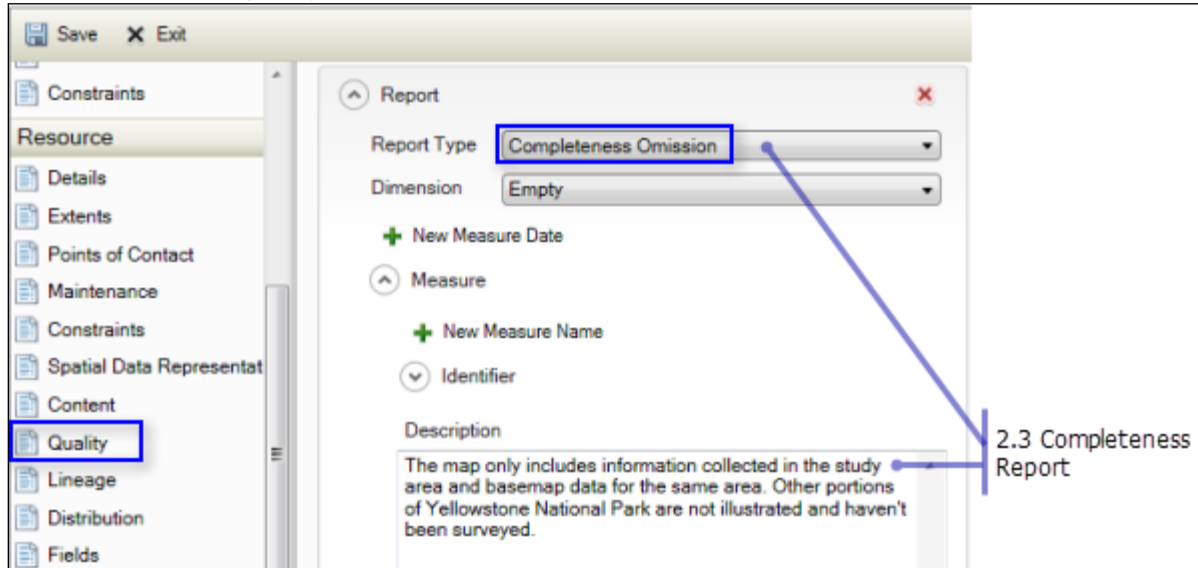
Section Two: Data Quality

Logical_Consistency_Report (RESOURCE>QUALITY, New Report, Report Type: (Conceptual Consistency) & Measure, Description)

The screenshot shows the 'Report' dialog box in the ArcGIS 10.0 Metadata Editor. The 'Report Type' dropdown is set to 'Conceptual Consistency' and is highlighted with a blue box. A blue arrow points from the 'Report Type' dropdown to the text '2.2 Logical Consistency Report'. The 'Description' field is also highlighted with a blue box.

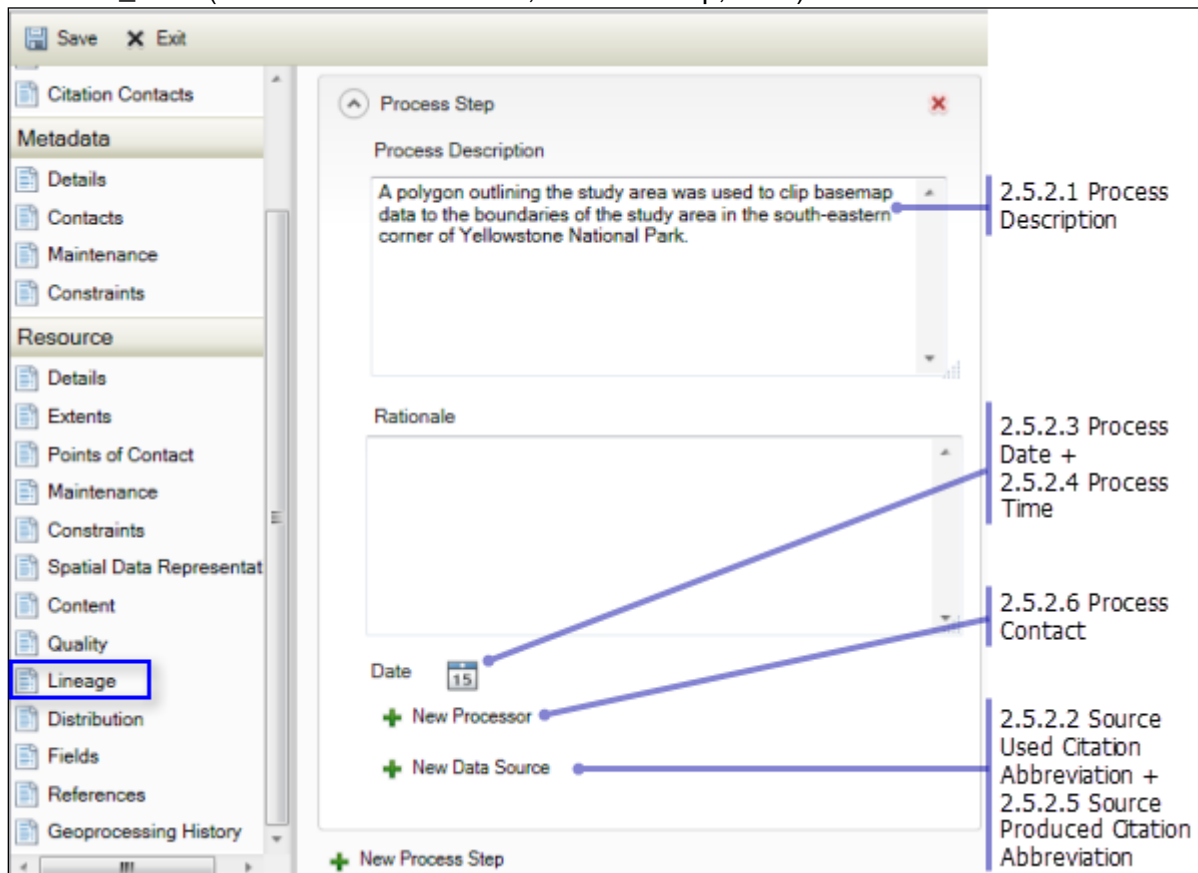
2.2 Logical
Consistency Report

Completeness_Report (RESOURCE>QUALITY, New Report, Report Type: (Completeness Omission) & Measure, Description)



Process_Description (RESOURCE>LINEAGE, Process Step, Process Description)

Process_Date (RESOURCE>LINEAGE, Process Step, Date)



If source data were used:

Source_Title (RESOURCE>LINEAGE, Data Source>Source Citation, Tiles)

Source_Citation_Abbreviation (RESOURCE>LINEAGE, Data Source, Source Citation, Alternate Title)

Source_Publication_Date (RESOURCE>LINEAGE, Data Source>Source Citation>Dates, Published)

Source_Originator (RESOURCE>LINEAGE, Data Source>Source Citation>+New Contact, Name & Role)

Save X Exit

Overview

- Item Description
- Topics & Keywords
- Citation
- Citation Contacts
- Metadata
- Details
- Contacts
- Maintenance
- Constraints
- Resource
- Details
- Extents
- Points of Contact
- Maintenance
- Constraints
- Spatial Data Repres
- Content
- Quality
- Lineage
- Distribution
- Fields
- References
- Geoprocessing Hist

Source Citation: Study area within Yellowstone National Park

Titles: Study area within Yellowstone National Park

Title: Study area within Yellowstone National

Alternate Title: study_area

Collective Title:

Presentation Form: Empty

FGDC Geospatial Data Presentation Form: Vector

Identifiers

Dates

Created: 15

Published: 1999-01-01 00:00:00

Revised: 15

Edition

Series

New Contact

Other Details

2.5.1.1 Source Citation: 8.4 Title

2.5.1.5 Source Citation Abbreviation

2.5.1.1 Source Citation: 8.2 Publication Date

2.5.1.1 Source Citation: 8.1 Originator + 8.8 Publication Information

Source_Contribution (RESOURCE>LINEAGE, Data Source, Source Description)

Type_of_Source_Media (RESOURCE>LINEAGE, Data Source>Media Name)

Source_Scale_Denominator (RESOURCE>LINEAGE, Data Source>Scale Denominator)

Save X Exit

Contacts

Maintenance

Constraints

Resource

- Details
- Extents
- Points of Contact
- Maintenance
- Constraints
- Spatial Data Representat
- Content
- Quality
- Lineage
- Distribution
- Fields
- References
- Geoprocessing History

Data Source

Source Description

This dataset contains a polygon that defines the study area's boundaries.

Medium Name: Hard Disk

Scale Denominator: 24000

Reference System

New Source Citation

New Source Extent

New Data Source

2.5.1.6 Source Contribution

2.5.1.3 Type of Source Media

2.5.1.2 Source Scale Denominator

2.5.1.1 Source Citation + 2.5.1.5 Source Citation Abbreviation

2.5.1.4 Source Time Period of Content

Source_Currentness_Reference (RESOURCE>LINEAGE, Data Source>Source Extent>Description)
Source_Time_Period_of_Content (RESOURCE>LINEAGE, Data Source>New Source Extent>New Temporal Period (or Instant) Extent)

Save X Exit

Citation

Citation Contacts

Metadata

Details

Contacts

Maintenance

Constraints

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Spatial Data Repres

Content

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Distribution

Fields

References

Geoprocessing Histi

Source Citation: Study area within Yellowstone National Park

+ New Source Citation

Source Extent

Description

The date when the study area outline was finalized.

Temporal Instant Extent

Instant Date 1999-03-10 00:00:00

+ New Bounding Box

+ New Geographic Description

+ New Temporal Period Extent + New Temporal Instant Extent

+ New Vertical Extent

+ New Source Extent

+ New Data Source

2.5.1.4.1 Source Currentness Reference

9.1.1 Calendar Date

2.5.1.4 Source Time Period of Content: 9.0 Time Period Information

Source_Online_Linkage (RESOURCE>LINEAGE, Data Source>Source Citation>Contact Information>Online Resource, Linkage)

Save X Exit

Citation

Citation Contacts

Metadata

Details

Contacts

Maintenance

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Spatial Data Representat

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Fields

References

Geoprocessing History

Distribution Information

+ New Distribution Format

+ New Distributor

Digital Transfer Options

Units of Distribution

Transfer Size

Online Resource

Linkage Yellowstone\yellowstone.mxd

Protocol

Profile

Name

Description

Function Empty

+ New Online Resource

Offline Medium

1.1 Citation: 8.10 Online Linkage

If data assessments performed:

Attribute_Accuracy_Report *(if applicable)* (RESOURCE>QUALITY, Report Type: Quantitative Attribute Accuracy, Measure>Description)

Horizontal_Positional_Accuracy_Report *(if applicable)* (RESOURCE>QUALITY, Report Type: Absolute External Positional Accuracy, Dimension: Horizontal)

Vertical_Positional_Accuracy_Report *(if applicable)* (RESOURCE>QUALITY, Report Type: Absolute External Positional Accuracy, Dimension: Vertical)

If aerial photography or imagery:

Cloud_Cover (RESOURCE>CONTENT, New Image Description, Quality Code, Cloud Cover Percentage)

The screenshot shows the 'Content Information' window in the ArcGIS Metadata Editor. The 'Image Description' section is expanded, showing fields for 'Attribute Description' (SPOT-5), 'Content Type' (Image), 'Band', and 'Quality Code'. The 'Cloud Cover Percentage' field is set to 13.5, with a slider control and a label '2.6 Cloud Cover' pointing to it. The left sidebar shows the 'Content' tab selected under the 'Resource' category.

Section Three: Spatial Data Organization Information

Direct_Spatial_Reference_Method *(should be automatically filled in)*

Section Four: Spatial Reference Information

Horizontal_Datum *(should be automatically filled in if applicable)*

Ellipsoid_Name *(should be automatically filled in)*

Semi-Major_Axis *(should be automatically filled in)*

Denominator_of_Flattening_Ratio *(should be automatically filled in)*

Horizontal Coordinate System (compound element) *(should be automatically filled in)*

If Geographic (Lat/Lon):

Latitude_Resolution *(should be automatically filled in if applicable)*

Longitude_Resolution *(should be automatically filled in if applicable)*

Geographic_Coordinate_Units *(should be automatically filled in if applicable)*

or

If Planar (projected) data:

Planar_Coordinate-Encoding_Method *(should be automatically filled in if applicable)*

Abscissa_Resolution (should be automatically filled in if applicable)
Ordinate_Resolution (should be automatically filled in if applicable)
Planar_Distance_Units (should be automatically filled in if applicable)

If Map Projection:

Map_Projection_Name (should be automatically filled in if applicable)
<projection parameters - vary with Projection > (should be automatically filled in if applicable)
or

If Grid Coordinate System:

Grid_Coordinate_System_Name (should be automatically filled in if applicable)
<coordinate system parameters - vary with Coordinate System> (should be automatically filled in if applicable)

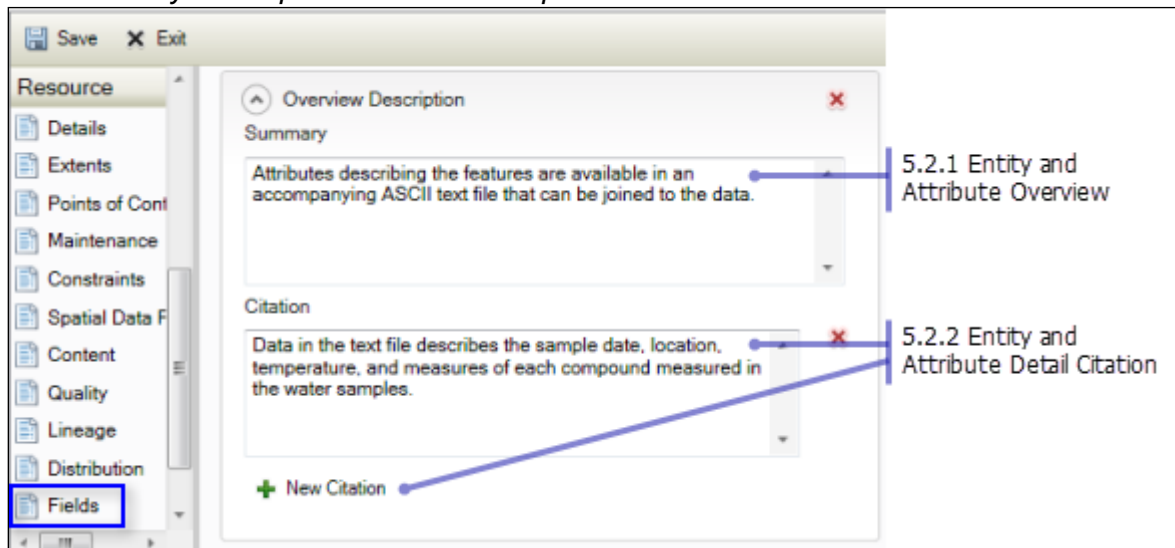
Additional elements are required for data maintained using:

Distance_and_Bearing_Representation (should be automatically filled in if applicable)
Local_Planar_Horizontal_Coordinate_System (should be automatically filled in if applicable)
Local_Horizontal_Coordinate_System (should be automatically filled in if applicable)
Vertical_Coordinate_System (should be automatically filled in if applicable)

Section Five: Entity and Attribute Information

Entity_and_Attribute_Overview (RESOURCE>FIELDS, Overview Description, Summary)
and/or

Entity_and_Attribute_Detailed_Description (RESOURCE>FIELDS, Overview Description, Citation)
If the data includes a database or coded domain that is not documented, you are strongly encouraged to additionally develop the detailed description within the fields themselves.



Section Six: Distribution Information

Distributor_Contact (RESOURCE>DISTRIBUTION, Distributor, Contact & Contact Information)

Contact_Organization (*preferred*) or **Contact_Person**

Contact_Position

Address_Type

Address

City

State_or_Province

Postal_Code

Contact_Voice_Telephone

Save X Exit

Extents
Points of Contact
Maintenance
Constraints
Spatial Data Rep
Content
Quality
Lineage
Distribution
Fields
References

Distributor

Contact: Environmental Systems Research Institute.

Name

Organization: Environmental Systems Researc

Position

Role: **Distributor**

Contact Information

+ New Ordering Process

6.1 Distributor

Distribution_Liability (RESOURCE>CONSTRAINTS, Legal Constraints, New Use Limitations, Use Limitations)

Save X Exit

Resource

Details
Extents
Points of Contact
Maintenance
Constraints
Spatial Data Representat
Content

Resource Constraints

+ New General Constraints

+ New Legal Constraints

+ New Security Constraints

6.3 Distribution Liability

Section Seven: Metadata Reference

Metadata_Date (METADATA>DETAILS, Date Stamp)

Save X Exit

Overview

Item Description
Topics & Keywords
Citation
Citation Contacts
Metadata
Details
Contacts
Maintenance
Constraints

Resource

Details
Extents

Metadata Details

File Identifier: (077081DE-DB81-4FB8-A1A0-F) Create

Parent Identifier

Dataset URI

Date Stamp: 2011-09-20

Language: English

Character Set: utf8

Hierarchy Level: Dataset

Hierarchy Level Name: dataset

7.1 Metadata Date

Metadata_Contact (METADATA>CONTACTS, Contact & Contact Information)

Contact_Organization or Contact_Person

[Contact_Position](#)

Address_Type

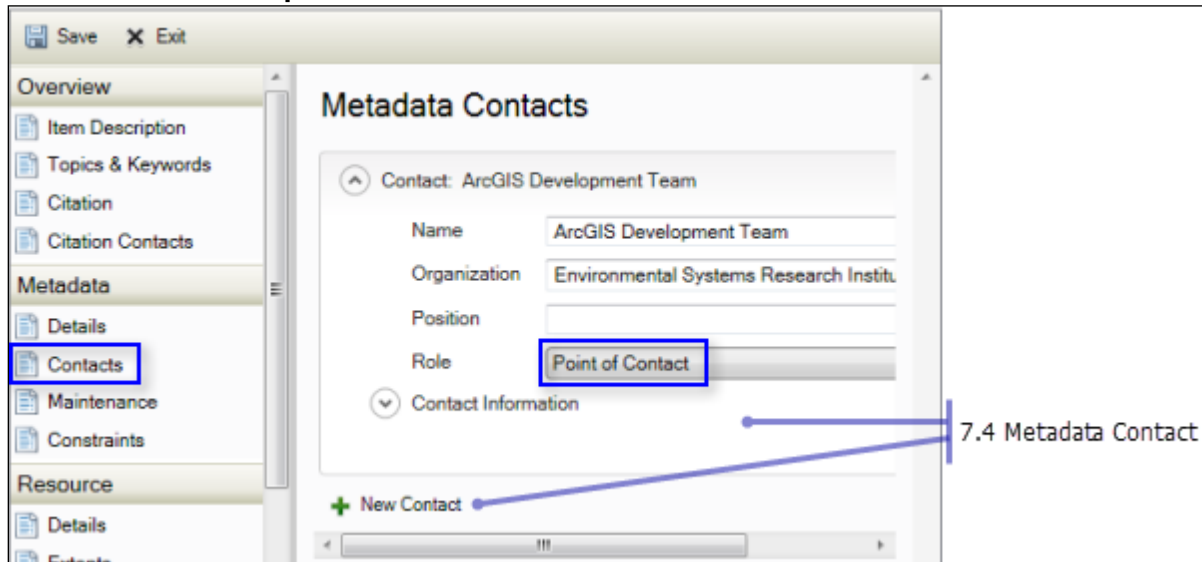
[Address](#)

City

State_or_Province

Postal_Code

Contact_Voice_Telephone



Metadata_Standard_Name (*automatically added*)

Metadata_Standard_Version (*automatically added*)